MEL'NIKOV, N.N.; MANDEL'BAUM, Ya.A.; BAKANOVA, Z.M.

Organic insecticide-fungicides. Part 63: Synthesis of some derivatives of phosphinic acids. Zhur.ob.khim. 31 no.12:3953-3955 D '61. (MIRA 15:2)

1. Nauchnyy institut po udobreniyam i insektofungitsidam imeni Ya.V. Samoylova, Moskva.
(Phosphinic acid)
(Insecticides)

MEL'NIKOV, N.N.; SOKOLOVA, Ye.M.; TRUNOV, P.P.; BRUSENINA, G.I.

Preparation of captan, a fungicide. Zhur.prikl.khim. 34 no.11: 2550-2554 N '61. (MIRA 15:1)

(Captan)

MEL'NIKOV, N.N.; VOLODKOVICH, S.D.; VOL'FSON, L.G.; GRANIN, Ye.F.

Production and insecticide properties of octachloroendomethylenetetrahydrophthalan. Zhur. prikl. khim. 34 no. 12:2716-2722 D '61.
(MIRA 15:1)

1. Nauchnyy institut po udobreniyam i insektofungisidam imeni professora Samoylova.
(Phthalan)

MEL'NIKOV, N.N.; SHVETSOVA-SHILOVSKAYA, K.D.; GRAPOV, A.F.

Preparing carbophos. [Trudy] NIUIF no.171:7-14 '61. (MIRA 15:7)
(Malathion)

MEL'NIKOV, N.N.; MIL'SHTEYN, I.M.; SHVETSOVA-SHILOVSKAYA, K.D.

Preparing chlorophos. [Trudy] NIUIF no.171:15-19 '61.
(MIRA 15:7)
(Chlorophos)

VOL'FSON, L.G.; MEL'NIKOV, N.N.; PLATE, A.F.; TARASOVA, G.A.; PERSON,
A.I.; PLETNEVA, L.S.

Preparation of isodrin and endrin. [Trudy] NIUIF no.171:
52-60 '61. (MIRA 15:7)
(Isodrin) (Endrin)

MEL'NIKOV, N.N.; SOKOLOVA, Ye.M.; TRUNOV, P.P.

Ethylene-bis-dithiocarbamate of zinc as a substitute for copper preparations. [Trudy] NIUIF no.171:111-116 '61. (MIRA 15:7)
(Fungicides) (Zinc organic compounds)

ANDREYEVA, Ye.I.; MEL'NIKOV, N.N.; SKALOZUBOVA, A.V.

Hexachlorobenzene as a disinfectant of wheat seeds against covered smut. [Trudy] NIUIF no.171:129-130 '61. (MIRA 15:7)
(Smuts) (Wheat—Diseases and pests)

MEL'NIKOV, N.N.; ANDREYEVA, Ye.I.; YEVTEYEVA, N.M.; IVANOVA, S.N.;
KOLBASOVA, I.M.; MARTYNOVA, Ye.A.

Tin organic compounds as seed disinfectants. [Trudy] NIUIF no.171:131-134 '61. (MIRA 15:7)
(Tin organic compounds) (Seeds--Disinfection)

MEL'NIKOV, N.N.; NUTOVICH, P.B.

Amine salts of halophenoxyacetic acids. [Trudy] NIUIF no.171: 135-137 '61. (MIRA 15:7)

(Acetic acid) (Herbicides)

MEL'NIKOV, N.N.; GALASHINA, M.L.; BUTRYAKOVA, Z.V.

Synthesis of some bis-(alkyl xanthogen)-tri- and tetrasulfides as experimental defoliants and desiccants. [Trudy] NIUIF no.171:138-142 '61. (MIRA 15:7)
(Defoliation) (Drying agents) (Sulfides)

MEL'NIKOV, N.N.; MANDEL'BAUM, Ya.A.; LOMAKINA, V.I.

Repellents based on indalone and dimethyl karbate. [Trudy]
NIUIF no.171:143-150 '61 (MIRA 15:7)
(Insect baits and repellents)

MANDEL'BAUM, Ya.A.; LOMAKINA, V.I.; MEL'NIKOV, N.N.

Amides of acids as repellents. [Trudy] NIUIF no.171:151-158 '61. (MIRA 15:7)
(Insect baits and repellents) (Amides)

MANDELBAUM, YA.A., ZAKS, P.G., MELNIKOV, N.N.

New method of synthesizing esters of thiophosphoric acid.

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and application of organophosphorus compounds) A. YE. ARBUZOV, Ed.
Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962, 632 pp.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

MEL'NIKOV, N. N

51. VINYL [illegible] . . . . [illegible]
52. ESTERS OF [illegible] V. S. [illegible] . . . . [illegible]
53. DERIVATIVES OF [illegible] WITH PHOSPHORIC ANHYDRIDE
54. REACTI[illegible] L. A. [illegible] . . . . [illegible]
[illegible] . . . . [illegible]
55. SYNTH[illegible] . . . .
56. REACTI[illegible] WITH BIS(DIALKY-
[illegible] . . . . [illegible]
[illegible] . . . . [illegible]
57. NEW [illegible]
58. SYNTHESIS AND [illegible] M. F. [illegible]
[illegible] . . . . [illegible]
[illegible] et al.
59. SYNTHESIS OF [illegible] ACIDS WITH POSSIBLE PHYSIOLOGICAL A[illegible] . . . . –
60. ESTERS OF [illegible] AND PHYSIOLOGICAL ACTIVITY. [illegible] . . . . [illegible]
[illegible] et al. . . . . [illegible]
61. ETHYLENE[illegible] L. D. Pro[illegible] . . . .
62. ETHYLENIMINE DERIVATIVE[illegible] AND [illegible]PHORIC ACIDS AND THEIR BIOLOGICAL [illegible] V. A. [illegible] et al. . . . . [illegible]
63. SUBSTITUTION OF CH[illegible] AMINO DERIVATIVES. A. A. Kropacheva AND BIOLOGICAL ACT[illegible] 372
et al. . . . .
64. MECHANISM OF THE ACTION OF [illegible] PHOSPHORUS COMPOUNDS ON WEAR AND FRICTION. . . . . 37[illegible]
P. I. Sanin and A. V. [illegible] . . . . [illegible]
65. USE OF DIALKYL [illegible] IN INDUSTRY. P. I. Sanin et al. . . . . [illegible]
66. ORGANOPHOSPHORUS COM[illegible] GROUPS AS OIL ADDITIVES. P. I. Sanin et al. . . . [illegible]
67. TRICHLOROETHYL PHOSPHATE AS A POLY(VINYL CHLORIDE) PLASTICIZER. V.A. Voskresenskiy . . . [illegible]
68. AZOMETHINE DYES CONTAINING PHOSPHORUS GROUPS. M. G. Imaev 399

PHYSIOLOGY SECTION

69. PHYSIOLOGICAL ACTIVITY OF ORGANOPHOSPHORUS COMPOUNDS. E. V. Zeimal et al. 403
70. MECHANISM AND KINETICS OF THE REACTION OF ORGANOPHOSPHORUS COMPOUNDS WITH CHOLINESTERASE. V. A. Yakovlev . . . . 4[illegible]

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and Application of Organophosphorus Compounds) A. Ye. Arbuzov, Ed. publ. by Kazan' Affil, Acad. Sci. USSR, Moscow, 1962 632pp.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

MEL'NIKOV, N.N.

Fourteenth International Symposium on Plant Protection.
Khim.prom. no.9:621 Ag '62. (MIRA 15:9)
(Plants, Protection of--Congresses)

VOL'FSON, L.G.; MEL'NIKOV, N.N.; PLATE, A.F.; PEREL'MUTER, P.M.;
VOLODKOVICH, S.D.; PRYANISHNIKOVA, M.A.; LEBEDEVA, K.V.;
VOLOSHKEVICH, N.P.

Continuous method for the preparation of aldrin. Khim.prom. no.10:714-717 O '62. (MIRA 15:12)
(Aldrin)

MEL'NIKOV, N.N.; VOLODKOVICH, S.D.; VOL'FSON, L.G.; KUKALENKC, S.S.

Diene synthesis reactions with polyhalocyclopentadienes. Reakt.-org.soed 11:7-230 '62. (MIRA 15:6)
(Chemistry, Organic--Synthesis) (Cyclopentadiene)

MEL'NIKOV, N.N.; SHVETSOVA-SHILOVSKAYA, K.D.; ZAKHAROVA, T.S.

Herbicides and plant growth controlling agents. Part 37: Synthesis of some urea derivatives. Zhur.ob.khim. 32 no.2: 381-383 F '62. (MIRA 15:2)

1. Nauchnyy institut po udobreniyam i insektofungitsidam imeni Ya.V. Samoylova.

(Urea)
(Growth promoting substances)

MEL'NIKOV, N.N.; SHVETSOVA-SHILOVSKAYA, K.D.; ITALINSKAYA, T.L.

Organic insecticides-fungicides. Part 64: Interaction of triphenylphosphine with bis(dialkoxythiophosphone) disulfides, thiuram disulfide, and xanthogen disulfide. Zhur.ob.khim. 32 no.3:847-848 Mr '62. (MIRA 15:3)
(Phosphine) (Sulfides) (Insecticides)

MEL'NIKOV, N.N.; KHASKIN, B.A.; SHVETSOVA-SHILOVSKAYA, K.D.

Organic insecticides-fungicides. Part 65: Reactions of thiophosphoric and dithiophosphoric esters with primary amines. Zhur.ob.khim. 32 no.6:1836-1838 Je '62. (MIRA 15:6)

1. Nauchnyy institut po udobreniyam i insekto-fungitsidam im. Ya.V.Samoylova, Moskva.

(Phosphorothioic acid) (Phosphorodithioic acid)
(Insecticides)

MEL'NIKOV, N.N.; KHASKIN, B.A.; SHVETSOVA-SHILOVSKAYA, K.D.; PERSHIN, G.N.;
MILOVANOVA, S.N.

Organic insecticides-fungicides. Part 67: Interaction of thio- and dithiophosphoric acid esters with higher aliphatic amines and fungicide and bactericide activity of reaction products. Zhur.-ob.khim. 32 no.9:2858-2863 S '62. (MIRA 15:9)

1. Nauchnyy institut po udobreniyam i insektofungitsidam imeni prof. Ya.V. Samoylova (Moskva).
(Phosphorothioic acid) (Amines) (Fungicides)
(Bactericides)

SHVETSOVA-SHILOVSKAYA, K.D.; MEL'NIKOV, N.N.; MAKSIMOVA, Z.I.;
ZAKHAROVA, T.S.; BOCHAROVA, L.P.

Organic insectifungicides. Part 66: Synthesis and insecticide properties of esters of certain carbamic acids. Zhur.ob.khim. 32 no.10:3230-3232 O '62. (MIRA 15:11)

1. Nauchnyy institut po udobreniyam i insektofungitsidam imeni Ya.V. Samoylova.
(Carbamic acid) (Insecticides)

MEL'NIKOV, N. N.; SHVETSOVA-SHILOVSKAYA, K. D.; LEBEDEVA, E. I.

Herbicides and plant regulators. Part 38: New method of preparing aryldialkylureas. Zhur. ob. khim. 32 no.12:3957-3959 D '62. (MIRA 16:1)

1. Nauchnyy institut po udobreniyam i insektofungitsidam imeni Ya. V. Samoylova, Moskva.

(Urea)

MEL'NIKOV, N. N.; TRUNOV, P. P.

Organic insectofungicides. Part 68: Preparation of salts of tetrathionic acid with aromatic amines. Zhur. ob. khim. 32 no.12:4015-4017 D '62. (MIRA 16:1)

1. Nauchnyy institut po udobreniyam i insektofungitsidam imeni Ya. V. Samoylova, Moskva.

(Tetrathionic acid) (Fungicides)

MEL'NIKOV, N.N., doktor khimicheskikh nauk, laureat Gosudarstvennoy premii

"Cido" means "I kill." Izobr.i rats. no.1:16-18 '63. (MIRA 16:3)
(Insecticides)

MEL'NIKOV, N.N.; ZUBOV, M.F.; TRUNOV, P.N.; SANIN, M.A.; FEDOSEYENKO, L.G.; UKRAINETS, N.S.; PIVOVAROVA, T.M.

Fungicide for controlling powdery mildew fungi. Zashch. rast. ot vred. i bol. 8 no.1:31 Ja '63. (MIRA 16:5)
(Fungicides) (Mildew)

BASKAKOV, Yu. A.; MEL'NIKOVA, I. A.; MEL'NIKOV, N. N.

Synthesis of 4-chlorobutyn-2-yl esters of carbamic acids.
Zhur. ob. khim. 33 no.1:46-49 '63. (MIRA 16:1)

(Carbamic acid) (Butynol)

BASKAKOV, Yu.A.; MEL'NIKOV, N.N.; MEL'NIKOVA, I.A.; KONSTANTINOVA, N.V.

Synthesis of sym-triazine derivatives containing O-alkyl- and O, N-dialkyl hydroxylamine groupings. Dokl. AN SSSR 149 no.5:1064-1066 Ap '63. (MIRA 16:5)

1. Nauchnyy institut po udobreniyam i insektofungitsidam im. Ya.V.Samoylova. Predstavleno akademikom S.I.Vol'fkovichem.
(Triazine) (Hydroxylamine)

L 48846-65 EWT(1)/EWA(j)/T/EWA(b)-2 RO/JK

ACCESSION NR: AP5015137 UR/0063/64/009/005/0482/0486

AUTHOR: Melnikov, N. N. (Professor)

22
21

TITLE: Pesticides in agriculture

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 9, no. 5, 1964, 482-486

TOPIC TAGS: agriculture, fungicide, insecticide, weed killer, economic development

Abstract: Reviewing the rapid development of the production of chemical preparations for use in USSR agriculture in the period through 1970 and the economic advantages of the use of various chemical agents, the author discusses aspects of the use of basic types of chemical preparations for agriculture: 1) for controlling pests of plants and animals, including rodents (insecticides, acaricides, nematocides, soil sterilizers, etc.); 2) agents for controlling plant diseases (seed fungicides and fungicides for the treatment of growing plants); 3) agents for controlling weeds (herbicides); 4) agents promoting mechanization in harvesting (defoliants and desiccants) as well as for the

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L 48846-65
ACCESSION NR: AP5015137

stimulation and inhibition of plant growth. Dangers of pesticides to man, domestic animals, useful insects, and plants are discussed. The use of insect attractants and chemical sexual sterilizers (antimetabolites and alkylating agents) for controlling insect pests is described. The need for a combination of the chemical method of pest control with biological and microbiological methods is mentioned. A search for new and effective pesticides with selective action and low acute and chronic toxicity for man and animals is called for, and new classes of compounds that might yield such preparations are presented.

Orig. art. has 5 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: LS, OC

NO REF SOV: 001 OTHER: 013 JPRS

Card 2/2

L 48843-65 EWT(1)/EWA(j)/T/EWA(b)-2 RO

ACCESSION NR: AP5015141 UR/0063/64/009/005/0524/0536

AUTHOR: Melnikov, N. N. (Professor)

17
B

TITLE: Organophosphorus pesticides and insecticidal esters of carbamic acids

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 9, no. 5, 1964, 524-536

TOPIC TAGS: insecticide, fungicide, weed killer, organic phosphorus compound, ester, carbamic acid, agriculture

Abstract: The article presents literature survey of organophosphorus compounds used to protect plants from pests, diseases, and weeds. The basic trends in the recent development of scientific research in the field of organophosphorus insecticides has been a search for more effective preparations, less toxic for mammals, and a search for insecticides capable of replacing DDT and other persistent organochlorine insecticides for controlling biting insect pests. The basic types of organophosphorus compounds of practical significance are described: mixed esters of phosphoric acid; unsaturated esters of dialkylphosphoric acids; enol phosphates and thiophosphates. The author notes that derivatives of thio- and dithiophosphoric acids are substantially less toxic for

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L 48843-65

ACCESSION NR: AP5015141

animals than the highly toxic phosphoric acid derivatitives. The properties of O,O-dialkylarylthio- and dithiophosphates have been systematically investigated in the search for new insecticides and acaricides possessing lower toxicity for men and domestic animals and have yielded interesting and important compounds. A number of heterocyclic compounds containing phosphorus, boron, and other elements in the ring have also been synthesized but have not yet been used. Extremely active preparations have been obtained from the series of derivatives of alkyl- and arylphosphinic and thiophosphinic acids. Another important group of modern pesticides is composed of derivatives of carbamic acid, used to control weeds, as well as plant pests and animal ectoparasites. Orig. art. has 30 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: LS, OC

NO REF SOV: 218 OTHER: 069 JPRS

Card 2/2

L 60513-65 EWT(l)/EWA(j)/T/EWA(b)-2 RO

ACCESSION NR: AP5011981 UR/0348/65/000/003/0004/0006

75

AUTHOR: Mel'nikov, N. (Professor)

59

TITLE: Second All-Union Convention on chemical means for plant protection B

SOURCE: Zashchita rasteniy ot vrediteley i bolezney, no. 3, 1965, 4-6

TOPIC TAGS: agriculture, pesticide, biological research, toxin, toxic substance

ABSTRACT: Some 500 specialists attended the Second All-Union Convention on Chemical Means for Plant Protection, held in Kiev in November. About 180 reports were delivered by the following speakers and on the following subjects: V. N. Antonov on the plans of the chemical industry; V. V. Kosov on satisfying the needs of agriculture; V. S. Chuvakhin on the needs of agriculture; I. M. Polyakov and the author of this article on studies of new preparations; L. I. Medved' on the safe uses of chemical preparations; G. A. Wilson on the problems of chemical machine construction; S. G. Starostin on the state and the prospects of aerial distribution methods. Some 30 reports were delivered at the section for the technology of insecti-, fungi-, and herbicides. The section for the studies of new pesticides heard several speeches on the necessity for new preparations. Over 40 reports were delivered at the section for the study and application of

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L 50513-65
ACCESSION NR: AP5011981

insecticides. Here V. P. Vasil'yev and D. F. Rudnev spoke on the main directions
of the rational chemical method for the protection of plants, and G. V. Gegenava
spoke on some problems in determining the effectiveness of pesticides. Many
reports dealt with testing of separate preparations. K. A. Gar, N. A. Guseva, and
others spoke of changes in the activity of some ferments; V. L. Tsipkalo, K. A.
Orlachova, S. A. Roslavtseva, P. V. Popov, and Z. Z. Golubeva spoke on the
acquired resistance of pests to pesticides; N. I. Petrushova on mite and tick
control; P. I. Mitrofanov on citrus plant protection; G. I. Marechek on grape
vine protection. A. S. Degtyareva, V. A. Sanin, O. I. Petrukha, and I. V.
Tropinin spoke on the low-volume spraying of various cultures. Several reports
were dedicated to the determination of residual toxins and to new zooicides. The
section for testing and application of fungicides heard reports described in de-
tail in the article by N. M. Golyshin. The section on the testing and application
of herbicides, defoliators, and dessicants heard reports by I. D. Balandina, N.
Azimbekov, and E. L. Alkhanyants (cotton); N. I. Rumyantsev, A. M. Sofinskiy, and
Ya Monstvilayte (sugar beets); N. F. Murashova (flax); L. D. Stonov and others
(rice); V. I. Zavarzin (fruit); R. A. Khabutiya, P. I. Mitrofanov, P. B. Alan,
V. F. Mormyleva (subtropical); V. A. Zakharenko (cereals). M. Ya. Berezovskiy,
K. A. Abramova, V. A. Zakharenko, and Yu. N. Geshtovt spoke on the control of
harmful weeds. The use of defoliators, such as organic compounds of phosphorus,

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L 50512-65
ACCESSION NR: AP5011981

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was discussed by T. Ya. Babayev, L. D. Stonov, N. F. Zubkova, N. A. Gruzinskaya, and I. L. Bogatyrev. The section on labor hygiene heard Yu. S. Kagan, M. A. Kislenko, and T. N. Pan'shina on the selective toxicity of organophosphorus insecticides; V. G. Tsapko on the joint action of chlorophos and DDVF; Ye. I. Spynu on the dependence of the toxicity on the structure of chlorohydrocarbons; S. G. Serebryanaya and A. A. Tovstanovskaya on the causes and prevention of contamination of foodstuffs with pesticides; K. A. Vyatchannikov on prophylactics for organophosphorus poisoning, Yu. I. Kundiyev on the resorptive toxicity of these compounds, etc. Various resolutions made by the separate sections and by the entire convention are listed.

ASSOCIATION: VNIIKhSZR

SUBMITTED: 00 ENCL: 00 SUB CODE: LS

NO REF SOV: 000 OTHER: 000

Card 3/3

L 34617-66 EWT(1) RO

ACC NR: AP6026578 SOURCE CODE: UR/0366/65/001/012/2166/2169

AUTHOR: Mel'nikov, N. N.; Nuridzhanyan, K. A.; Kuznetsova, G. V.; Guseva, L. P. 35 B

ORG: All-Union Scientific Research Institute of Chemical Agents of Plant Protection, Moscow (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

TITLE: Herbicides and plant growth regulators. XLIII. Synthesis of chloromethylaryloxy-alpha-propionic and chloromethylaryloxy-gamma-butyric acids

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 12, 1965, 2166-2169

TOPIC TAGS: plant growth, herbicide, chemical synthesis, carboxylic acid, methylation, chemical reduction, ester, amine

ABSTRACT: **Study of the chloromethylation of aryloxyalkylcarboxylic acids has shown that in all cases the corresponding chloromethylaryloxyalkylcarboxylic acids are produced in good yields and the reaction occurs under relatively mild conditions. The chloromethyl group enters position 4, but if position 4 is filled, it enters position 2. This course of the reaction is demonstrated by the fact that in the reduction of chloromethyl derivatives the corresponding methyl derivatives described in the literature are obtained. For example, reduction of the product obtained by chloromethylation of 4-chlorophenoxy-gamma-butyric acid, results in 4-chloro-2-methyl-phenoxy-gamma-butyric acid. Study of the physiological activity of the compounds synthesized shows that chloromethylaryloxyalkylcarboxylic acids are less toxic to plants than the corresponding aryloxyalkylcarboxylic acids. To find new compounds physiologically active for plants, several chloromethylaryloxyalkylcarboxylic acids, their esters, and amines not described in the literature were synthesized.** Orig. art. has: 2 tables. [JPRS: 36,455]

SUB CODE: 07, 06 / SUBM DATE: 30Nov64 / ORIG REF: 004 / OTH REF: 001

Card 1/1 UDC: 541.69:547.472'563.3

L 41276-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP5025124 SOURCE CODE: UR/0079/65/035/010/1746/1752

AUTHOR: Belikova, N. A.; Lebedeva, K. V.; Mel'nikov, N. N.; Plate, A. F.

51
B

ORG: All-Union Scientific Research Institute of Chemical Means for Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskiky sredstv zashchity rasteniy)

TITLE: From the field of organic insecticides-fungicides. LXXXIII. Oxidation of some cyclic compounds with hydrogen peroxide

27 B

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1746-1752

TOPIC TAGS: cyclic compound, hydrogen peroxide, oxidation, chemical synthesis, insecticide, fungicide

ABSTRACT: Unsaturated cyclic compounds, including bridged and fused hydrocarbons, chlorohydrocarbons, aldehydes, esters, alcohols and nitriles with unsaturation in ring or side chains were oxidized with hydrogen peroxide to study possibly convenient routes for synthesis of α-hydroxy compounds and particularly of such compounds with potential insecticide-activity, replacing methods which apply unstable and explosive peroxy-acids. The compounds were treated at 40—100C 2—6 hr with 2—3 or 1—2 mole H_2O_2/mole starting compound in glacial acetic acid or tert.-butyl alcohol, respectively. In glacial acetic acid,

Card 1/2 UDC: 542.955.2:547.5

L 41276-66
ACC NR: AP5025124

α-hydroxy substitution was produced if such compounds had sufficient stability under reaction conditions, glycols or monoacetates of the latter being otherwise obtained. Unsaturation in side chains gave mainly glycols or acetates, and oxidation in tert.-butyl alcohol gave α-hydroxy compounds or glycols. Orig. art. has: 2 tables.

SUB CODE: 06/ 07/ SUBM DATE: 08Jun64/—Oct65/ ORIG REF: 018/ OTH REF: 016

Card 2/2

L 26061-66 EWT(1) RO

ACC NR: AP5025126 SOURCE CODE: UR/0079/65/035/010/1771/1774 58 56 B

AUTHOR: Mel'nikov, N. N.; Grapov, A. F.; Razvodovskaya, L. V.; Portnova, S. L.

ORG: All-Union Scientific Research Institute for Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut zashchiti rasteniy)

TITLE: Herbicides and plant growth regulators; XLIII. The reaction of acid chloride of N,N-dimethylamidomethylphosphonic acid with anilines

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1771-1774

TOPIC TAGS: pesticide, plant growth, phosphonic acid, organic phosphorus compound, aniline, organic amide, IR spectrum, electron paramagnetic resonance

ABSTRACT: Continuing the work on the search for new effective chemical agents for plant protection, the reaction of acid chloride of dimethylamidomethylphosphonic acid with anilines was studied. The reaction occurs in two directions. Depending on the nature of the solvent and the substitute N,N-dimethyl-N'-aryldiamidomethylphosphonates or N,N'-diaryldiamidomethylphosphonates form in the benzol ring of aniline. In the aniline benzol, m and n-chloranilines and m-toluidine form symmetrical diamides, and n-toluidine forms an asymmetrical diamide of methylphosphonic acid. In chloroform, n-chloraniline and m and n-toluidines

Card 1/2 UDC: 632.954

L 26061-66

ACC NR: AP5025126

2.

form asymmetrical diamides, aniline forms a symmetrical diamide, m-chloraniline forms a mixture of an asymmetrical and symmetrical diamide of methylphosphonic acid. Aniline in an acetone and petroleum ester forms an asymmetrical diamide. The structure of compounds obtained is confirmed by intensity measurements of the symmetrical valence oscillation band of the benzol ring in infrared spectra (1600 cm^{-1}) and paramagnetic resonance spectra. We thank A. F. Vasil'yev and V. V. Galushina for the infrared spectra research. Orig. art. has: 1 fig. and 1 table.

SUB CODE: 06,07,20/ SUBM DATE: 30Jun64/ ORIG REF: 001/ OTH REF: 002

Card 2/2

L 26058-66 EWT(1)/T JK

ACC NR: AP5025125 (N) SOURCE CODE: UR/0079/65/035/010/1752/1759 48 47 B

AUTHOR: Lomakina, V. I.; Voronkova, V. V.; Mandel'baum, Ya. A.; Mel'nikov, N. N.

ORG: All-Union Scientific Research Institute of Chemical Agents for Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

TITLE: From the organic insectofungicide field; LXXIV. The reaction of trialkylphosphites with thiolmonochloroacetates

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1752-1759

TOPIC TAGS: insecticide, fungicide, organic phosphorus compound, chromatography, chemical precipitation, ester, organic synthetic process, chlorinated organic compound, IR spectrum

ABSTRACT: By the reaction of trialkylphosphites with esters of thiolmonochloroacetic acid a number of compounds were synthesized which possess strong insecticide activity. In analogizing the reaction of trialkylphosphites with esters of monochloroacetic acid, it was suggested that the compounds obtained have a structure which corresponds to the classical schematic of the Arbuzov reaction. In addition to knowing that the structure of products of the trialkylphosphite reaction with thiolmonochloroacetic acid esters is very interesting in studying the mechanism of the insecticide reaction of organic phosphorous compounds, it was interesting to

Card 1/2 UDC: 542.955.2:547.5

L 26058-66

ACC NR: AP5025125

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study this reaction in detail and to determine all the products which are derived. In studying the triethylphosphite reaction with ethylthiolmonochloroacetate, 0,0-diethyl-0-(1-ethylthio)vinylphosphate and diethoxyphosphonthiolacetate were precipitated. In order to separate the products of the trialkyphospite reaction with the thiolmonochloroacetates the laminated column chromatography method was used. All the substances precipitated from the reaction products were identified not only by analysis and constant determination but also by infrared spectra. The authors thank A. F. Vasil'yev for taking spectra of all compounds. Orig. art. has: 2 fig. and 3 tables.

SUB CODE: 06, 07/ SUBM DATE: 18May64/ ORIG REF: 010/ OTH REF: 006

Card 2/2

L 27766-66 EWT(1) RO

ACC NR: AP6018497 SOURCE CODE: UR/0079/65/035/011/1940/1945

32

B

AUTHOR: Anishchenko, A. F.; Volodkovich, S. D.; Mel'nikov, N. N.

ORG: All-Union Scientific Research Institue of Chemical Means of Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

TITLE: From the field of organic insectofungicides. 6 LXXXV. Synthesis of N-Alkyl-and N, N-Dialkyl-1,2,3,4,7,7-hexachlorobicyclo[2,2,1]heptene-2-methyl-5-carbamates

SOURCE: Zhurnal obshchey khimii, v. 35, no. 11, 1965, 1940-1945

TOPIC TAGS: organic synthetic process, insecticide, carbamic acid, fungicide, ester, alkyl radical

ABSTRACT: In a search for new insecticides and a study of the dependence of pesticidal activity of carbamates on their chemical structure, a number of esters of N-alkyl- and N,N-dialkylcarbamic acid and 1,2,3,4,7,7-hexachlorobicyclo-[2,2,1]heptene-2-yl-5-methanol, not previously described in the literature, were synthesized. Carbamates were found to be produced in high yields in the reaction of the chlorocarbonic ester of 1,2,3,4,7,7-hexachlorobicyclo[2,2,1]-heptene-2-yl-5-methanol with the corresponding amines in an inert solvent (benzene or ether), in the presence of excess amine as an acceptor for the hydrogen chloride evolved. Toxicological tests revealed that as the content of carbon atoms in the alkyl on the nitrogen atom is increased, the fungicidal activity of the carbamates drops, while replacement of the hydrogen atom at the nitrogen atom by an alkyl leads to a loss of fungicidal activity. The greatest activity with respect to fungus spores and mycelia was possessed by N-methyl-1,2,3,4,7,7-hexachlorobicyclo[2,2,1]heptene-2-methyl-5-carbamate. Orig. art. has: 1 table and 1 formula. [JPRS]

Card 1/1 20 UDC: 542.955.2:547.5

L 25606-66 EWT(l) RO

ACC NR: AP6016702 SOURCE CODE: UR/0079/65/035/012/2209/2216

AUTHOR: Voronkova, V. V.; Lomakina, V. I.; Mandel'baum, Ya. A.; Mel'nikov, N. N. 49 B

ORG: All-Union Scientific Research Institute of Chemical Means of Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

TITLE: From the field of organic insectofungicides, (0 no. 88. Interaction of trialkylphosphites with thiolomonochloroacetates

SOURCE: Zhurnal obshchey khimii, v. 35, no. 12, 1965, 2209-2216

TOPIC TAGS: insecticide, fungicide, IR spectrum, organic phosphorus compound, chlorinated organic compound, organic sulfur compound

ABSTRACT: Upon studying the interaction of trialkylphosphites with thiolomonochloroacetates, it was found that the chief products of this reaction are dialkozyphosphonothioacetates, dialkyl-1-(Alkylthio)vinyl-phosphates and dialkoxyphosphonacetates. The latter compounds are the result of secondary processes occurring in the reaction. The supposition had been made that the formation of these compounds can occur in the interaction of trialkylphosphites with dialkoxyphosphonothioacetates:

$$(RO)_3P + (RO)_2P(O)CH_2COSR \longrightarrow (RO)_2PSR + (RO)_2P(O)CH_2COOR.$$

Card 1/2 UDC: 547.592

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L 25606-66

ACC NR: AP6016702

To confirm this assumption experimentally the interaction of triethylphosphite with diethoxyphosphonethylthioacetate was studied where diethoxyphosphonethylacetate, which was characterized by physical constants, analysis and IR-spectrum, was isolated from this reaction. The second component of the reaction could not be separated in a pure form because its R_f value was close to that of the corresponding oxygen analog.

The R_f values for a great number of organic phosphorus compounds were determined. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: 02Oct64 / ORIG REF: 003 / OTH REF: 004

Card 2/2

L 38696-66 EWT(1)/EWT(m)/EWP(j) RO/RM

ACC NR: AP6021413 SOURCE CODE: UR/0413/66/000/011/0018/0018

INVENTOR: Mandel'baum, Ya. A.; Mel'nikov, N. N.; Zaks, P. G.; Roslavtseva, S. A.

36

ORG: none

TITLE: Organophosphorus insecticides with increased activity. Class 12, No. 182138 [announced by All-Union Scientific Research Institute of Chemicals for Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 18

TOPIC TAGS: insecticide, organophosphorus compound, synergist, insect control

ABSTRACT: An Author Certificate has been issued for a method of increasing the insecticide activity of organophosphorus preparations by addition of synergists. The method involves the use of trialkyl thiolphosphates [sic] as the synergist. [BO]

SUB CODE: 06/ SUBM DATE: 17Jul64

Card 1/1 UDC: 632.951.2.547.419.1

0917. 2297

L 38697-66 EWT(m)/EWP(j) RM

ACC NR: AP6021416 SOURCE CODE: UR/0413/66/000/011/0020/0020

INVENTOR: Mandel'baum, Ya. A.; Mel'nikov, N. N.; Itskova, A. L.

23
B

ORG: none

TITLE: Preparative method for higher dialkylphosphite, Class 12, No. 182151

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 20

TOPIC TAGS: dialkylphosphite, methyl alcohol, higher alcohol

ABSTRACT: An Author Certificate has been issued for a preparative method of higher dialkylphosphites involving the treatment of phosphorus trichloride with a mixture of 1 mol methyl alcohol and 2 mols higher alcohol. [BO]

SUB CODE: 07/ SUBM DATE: 14Jun62/

Card 1/1 ZC UDC: 547.268'118.07

L 34128-66 EWT(m)/EWP(j) RM

ACC NR: AP6025527 SOURCE CODE: UR/0079/66/036/001/0044/0046

4

3

AUTHOR: Mandel'baum, Ya. A.; Zaks, P. G.; Mel'nikov, N. N.

ORG: All-Union Scientific Research Institute of Chemical Means of Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

TITLE: New method for producing mixed dialkyl phosphites

SOURCE: Zhurnal obshchey khimii, v. 36, no. 1, 1966, 44-46

TOPIC TAGS: chemistry technique, alcohol, water, phosphorus chloride

ABSTRACT: A new one-step method has been developed for producing dialkyl phosphites with various radicals. A mixture consisting of two different alcohols and water, taken in equimolar rations, is treated with phosphorus trichloride. Constants are cited for 11 dialkyl phosphites synthesized by this method. Orig. art. has: 1 table. [JPRS: 35,998]

SUB CODE: 07 / SUBM DATE: 04Nov64 / ORIG REF: 008 / OTH REF: 003

Card 1/1 UDC: 661.718.1

L 31212-66 EWT(1)/EWT(m)/EWP(j) RO/RM

ACC NR: AP6022794 SOURCE CODE: UR/0079/66/036/002/0269/0271

+8

B

AUTHOR: Mel'nikov, N. N.; Grapov, A. F.; Razvodovskaya, L. V.

ORG: none

TITLE: Organic insectofungicides. 6 XC. Nonsymmetrical diamides of methylthiophosphonic acid 1

SOURCE: Zhurnal obshchey khimii, v. 36, no. 2, 1966, 269-271

TOPIC TAGS: insecticide, fungicide, organic amide, substituent, organic phosphorus compound, organic synthetic process, chlorinated organic compound

ABSTRACT: In the light of the fungicidal and herbicidal activity of certain diamides of phosphoric and phosphonic acids, the authors investigated the influence of substitution of a sulfur atom in place of the oxygen atom upon the biological activity of such compounds. Nonsymmetrical diamides of methylthiophosphonic acid were synthesized by the reaction of the chlorides of amidomethylthiophosphonic acids with substituted anilines. In the reaction of the chloride of N,N-dimethylamidomethylthiophosphonic acid with aniline or p-chloroaniline in benzene or chloroform, only N,N-dimethyl-N'-aryldiamido-methylphosphonates were formed, independent of the solvent. Tests of the preparations indicated that they possess fungicidal activity. N-Isopropyl-N'-p-chlorophenyldiamidomethylthiophosphonate in a 0.01% concentration proved effective against mycelium and spores of various fungi. The authors thank L. G. Fedoseyenko for investigating the fungus activity of the preparations. Orig. art. has: 1 table. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: 01Jan65 / ORIG REF: 004

UDC: 661.718: 632.95

Card 1/1 0915 0773

L 31800-66 EWT(1) RO

ACC NR: AP6021671 SOURCE CODE: UR/0079/66/036/003/0447/0449

AUTHOR: Lomakina, V. I.; Mandel'baum, Ya. A.; Mel'nikov, N. N.

50
B

ORG: All-Union Scientific Research Institute of Chemical Agents for Plant Protection, Moscow (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

TITLE: Organic insectofungicides. LXXXIX. Interaction of triethyl phosphite with amides of monochloroacetic acid

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 447-449

TOPIC TAGS: insecticide, fungicide, organic phosphorus compound, organic amide, defoliant agent, chemical synthesis, systemic toxin

ABSTRACT: A number of amides of diethoxyphosphoneacetic acid, which had not been described in the literature, were synthesized by the reaction of triethyl phosphite with monochloroacetic acid amides in a search of new pesticides. Some of the compounds synthesized were found to possess physiological activity for plants and to be systemic acaricides. Some cause defoliation of cotton plants at the same standards of consumption as magnesium chloride. The n-butylamide of diethoxyphosphoneacetic acid in a 0.5% concentration causes 100% lethality for herbivorous mites. The authors thank P. V. Popov and L. D. Stonov for directing the biological experiments of the synthesized compounds. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: 01Jan65 / ORIG REF: 004 / OTH REF: 001

Card 1/1 UDC: 661.718:632.95

L 31801-66 EWT(1) RO

ACC NR: AP6021672 SOURCE CODE: UR/0079/66/036/003/0450/0453

AUTHOR: Mel'nikov, N. N.; Grapov, A. F.; Lebedeva, N. V. 52 B

ORG: All-Union Scientific Research Institute of Chemical Agents for Plant Protection, Moscow (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rastoniy)

TITLE: Organic insectofungicides. 6 XCII. Synthesis of acid chlorides, amides, and anilides of o-chlorophenylmethylphosphonic acid

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 450-453

TOPIC TAGS: fungicide, insecticide, chemical synthesis, organic phosphorus compound, chemical bonding, hydrogen bonding, IR spectrum, toxicity, organic amide, chlorinated organic compound

ABSTRACT: Derivatives of O-3-chlorophenyl- and O-4-chlorophenylmethylphosphonic acids were synthesized in a search for new insectofungicides, on the basis of the theory that the insecticidal properties of the preparations increase with increasing acidity of the acyl radical bound to the phosphorus atom. Amides and anilides of O-3-chlorophenyl- and O-4-chlorophenylmethylphosphonic acids were synthesized by the reaction of the chlorides of these acids with primary and secondary amines or substituted anilines. The formation of intermolecular hydrogen bonds in the dialkylamides was suggested by their low melting points and infrared spectra.

Card 1/2 UDC: 661.718:632.95

L 31801-66

ACC NR: AP6021672

Biological tests indicated high insecticidal activity of the preparations; some exhibited herbicidal activity. Orig. art. has: 1 figure and 2 tables. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: 11 Feb65 / ORIG REF: 003

Card 2/2

L 31814-66 EWT(1)/T RO/JK

ACC NR: AP6021673 SOURCE CODE: UR/0079/66/036/003/0453/0457

AUTHOR: Mel'nikov, N. N.; Khaskin, B. A.; Yelopina, L. T.

63
58
B

ORG: none

TITLE: Organic insectofungicides. 6 XCIII. Reaction of esters of phosphoric acid with higher aliphatic amines

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 453-457

TOPIC TAGS: insecticide, fungicide, phosphoric acid, ester, amine, chemical synthesis, ammonium salt, bactericide, nonmetallic organic derivative

ABSTRACT: The reaction of phosphoric acid esters with higher aliphatic amines and diamines was used to synthesize 16 substituted ammonium salts, which have not been described in the literature. The herbicidal and germistatic action of the synthesized compounds was studied on a large number of different microorganisms. The compounds obtained were found to possess high, broad-spectrum microbiological activity. In concentrations of $1.25 \cdot 10^{-2}$ to $1 \cdot 10^{-4}$%, they were active against Staphylococcus, Streptococcus, and coli, typhoid fever, dysentery, diphtheria, pyocyanic, and spore-bearing bacteria. The bactericidal activity of phosphoric acid derivatives is two to three times higher than that of N-substituted ammonium dialkyldithio-

Card 1/2 UDC: 661.718:632.95

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ACC NR: AP6021673

phosphates, while the fungicidal activity of the phosphates is two to three times lower than the activity of the corresponding dithiophosphoric acid derivatives. The research on fungus activity was done by N. M. Golyshin, M. F. Zubov, and N. C. Ukrainets. The statistics on bacteria activity were done by G.N. Pershin and S. N. Milovanova. Orig. art. has: 2 tables. [JPRS]

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SUB CODE: 07, 06 / SUBM DATE: 11Feb65 / ORIG REF: 008 / OTH REF: 001

Card 2/2 LS

L 31813-66 EWT(1) RO

ACC NR: AP6021674 SOURCE CODE: UR/0079/66/036/003/0457/0461

41
46
B

AUTHOR: Mel'nikov, N. N.; Grapov, A. F.; Lebedeva, N. V.

ORG: All-Union Scientific Research Institute of Chemical Agents for Plant Protection, (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

TITLE: Organic insectofungicides. 6 XCIV. Amides of O-arylmethyl- and chloromethylphosphonic acids

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 457-461

TOPIC TAGS: fungicide, insecticide, phosphonic acid, organic amide, chemical synthesis, chlorinated organic compound, plant development, toxicity

ABSTRACT: A series of amides of O-arylmethylphosphonic acid were synthesized by reaction of N,N-dialkylamidomethylphosphonic acid chlorides with phenols in the presence of triethylamine. N,N-diethyl-S-4-chlorophenylmethylthiophosphonate was synthesized analogously. O-Arylmethylphosphonic acid chlorides were found to be stable only when the original phenols have an ionization constant less than $1 \cdot 10^{-9}$. Otherwise the chlorides are unstable and are readily hydrolyzed in air to O-arylmethylphosphonic acids. O-Arylchloromethylphosphonic acid amides were synthesized by the reaction of O-arylchloromethylphosphonic acid chlorides with amines. The compounds pro-

UDC: 661.718:632.95

Card 1/2

L 31813-66

ACC NR: AP6021674

duced exhibit substantial herbicidal activity: in a concentration of 1-15 parts per million they produce 50% inhibition of the growth of radish sprouts and roots. A. V. Buzovkina participated in the experimental part of the work. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: 15Feb65 / ORIG REF: 005 / OTH REF: 005

Card 2/2

CHICHIBABIN, Aleksey Yevgen'yevich. Prinimali uchastiye: REUTOV, O.A.; KITAYGORODSKIY, A.I., prof.; LIBERMAN, A.L., doktor khim. nauk; BAGDASAR'YAN, Kh.S., doktor khim. nauk; PLATE, N.A., kand. khim. nauk; KOLOSOV, M.N., kand. khim. nauk; BOTVINIK, M.M., doktor khim. nauk; STEPANOV, V.M., kand. khim. nauk; MEL'NIKOV, N.N., prof.; DEREVITSKAYA, V.A., doktor khim. nauk; LIBERMAN, A.L., red.; SERGEYEV, P.G. [deceased]; ROMM, R.S., red.; SHPAK, Ye.G., tekhn. red.

[Basic principles of organic chemistry] Osnovnye nachala organicheskoi khimii. Izd.7. Pod red. P.G.Sergeeva i A.L. Libermana. Moskva, Goskhimizdat. Vol.1. 1963. 910 p. (MIRA 16:10)

1. Chlen-korrespondent AN SSSR (for Reutov).
(Chemistry, Organic)

SHVETSOVA-SHILOVSKAYA, K.D., kand.khim. nauk; SMIRNOVA, E.I., kand.khim. nauk; MEL'NIKOV, N.N., prof.

Chemical means for controlling warble flies. Zhur. VKHO 8 no.6:659-668 '63. (MIRA 17:2)

MEL'NIKOV, N.N., prof.

The 5th International Congress on Pesticides. Zhur. VKHO 8 no.6: 674-677 '63. (MIRA 17:2)

ZUBOV, M.F.; FEDOSEYENKO, L.G.; SANIN, M.A.; PIVOVAROVA, T.M.; ZIL'BERMINTS, I.V., kand. biolog. nauk; FADEYEV, Yu.N., kand. sel'skokhoz. nauk; ZHURAVLEVA, L.M.; KIPIANI, A.A., aspirant; MEL'NIKOV, N.N.; BOCHAROVA, L.P.; SHVETSOVA-SHILOVSKAYA, K.D.; SHAPOVALOV, G.K.; SPIRINA, T.A.; SEDYKH, A.S.; ZINCHENKO, V.A., aspirantka

From experiments in the use of new preparations. Zashch. rast. ot vred. i bol. 8 no.10:24-26 O '63. (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy (for Zubov, Fedoseyenko, Sanin, Pivovarova). 2. Gruzinskiy institut zashchity rasteniy (for Kipiani). 3. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya im Timiryazeva (for Zinchenko).

SHVETSOVA-SHILOVSKAYA, K.D.; MEL'NIKOV, N.N.; MAKSIMOVA, Z.I.

Organic insectofungicides. Part 69: Synthesis of esters of alkyl carbamic acids containing a carbonyl group in the ester radical. Zhur.ob.khim. 33 no.7:2109-2110 Jl '63. (MIRA 16:8)

1. Nauchnyy institut po udobreniyam i insektofungitsidam imeni Ya.V.Samoylova, Moskva.
(Insecticides) (Carbamic acid) (Carbonyl group)

MEL'NIKOV, N.N.; KHASKIN, B.A.; SHVETSOVA-SHILOVSKAYA, K.D.

Organic insectofungicides. Part 70: Problem of thione-thiol isomerization of some esters of phosphorothioic and phosphorodithioic acids on their reaction with amines. Zhur. ob. khim. 33 no.8:2456-2461 Ag '63. (MIRA 16:11)

1. Nauchnyy institut po udobreniyam i insektofungitsidam.

SHVETSOVA-SHILOVSKAYA, K.D.; BELAN, S.R.; MEL'NIKOV, N.N.

Herbicides and plant regulators. Part 39: Synthesis of some new derivatives of urea containing a carboethoxy group. Zhur. ob.khim. 33 no.10:3147-3149 O '63. (MIRA 16:11)

MANDEL'BAUM, Ya.A.; BAKANOVA, Z.M.; MEL'NIKOV, N.N.

Organic insectofungicides. Part 71: Synthesis of mixed esters of phosphoric and thiophosphoric acids. Zhur.ob.khim. 33 no.12:3819-3822 D '63. (MIRA 17:3)

1. Nauchno-issledovatel'skiy institut udobreniy i insektofungitsidov.

MEL'NIKOV, N.N.

New pesticides. Khim. prom. no.2:81-87 F '64. (MIRA 17:9)

MEL'NIKOV, N.N., prof.

Assortment of pesticides in England. Zashch. rast. ot vred. i bol. 9 no.1:50-51 '64. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy.

MEL'NIKOV, N.N., prof.

Pesticides in agriculture. Zhur. VKhO 9 no.5:482-485 '64
(MIRA 18:1)

Phosphorus organic pesticides and insecticidal esters of carbamic acid. Ibid.:524-536

MEL'NIKOV, N.N.; KHASKIN, B.A.; VASIL'YEV, A.F.; SHVETSOVA-SHILOVSKAYA, K.D.

Organic insectofungicieds. Part 72: Mechanism of thion-thiol isomerization of N-substituted ammonium thio- and dithiophosphates. Zhur.ob. khim. 34 no.1:40-44 Ja '64. (MIRA 17:3)

SHVETSOVA-SHILOVSKAYA, K. D.; MEL'NIKOV, N. N.; BORISOVA, I. M.; NOVIKOV
Ye.G.

Organic insectofungicides. Part 76: Synthesis of some new derivatives of carbamic acid. Zhur. ob. Khim. 34 no.6:1779-1780 Je '64. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy.

SHVETSOVA-SHILOVSKAYA, K.D.; LEBEDEVA, E.I.; MEL'NIKOV, N.N.

Organic insectofungicides. Part 77: Interaction of phosphorothioic and phosphorodithioic acid esters with amino acids and amino alcohols. Zhur. ob. khim. 34 no.7:2138-2140 Jl '64 (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy, Moskva.

L 4929-66 EWT(1)/EWA(j)/EWT(m)/EWA(b)-2 RO/GS/RM

ACC NR: AT5026041 SOURCE CODE: UR/0000/65/000/000/0255/0257

25

B+1

AUTHOR: Kraft, V. A. 44,5; Mel'nikov, N. N. 44,55

ORG: Institute of Plant Physiology imeni K. A. Timiryazev, Academy of Sciences SSSR 44,55 (Institut fiziologii rasteniy, Akademii nauk SSSR)

TITLE: Herbicides 1,44,5 and plant growth regulators. Part 40: Synthesis of certain esters of 3,6-endoxohexahydrophthalic and 4,5-dichloro-3,6-endoxohexahydrophthalic acid

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Biologicheski aktivnyye soyedineniya (Biologically active compounds). Moscow, Izd-vo Nauka, 1965, 255-257

TOPIC TAGS: phthalic acid, phthalic anhydride, ethanol

ABSTRACT: Acid esters of 3,6-endoxohexahydrophthalic acid and 4,5-dichloro-3,6-endoxohexahydrophthalic acid and complete esters of 3,6-endoxohexahydrophthalic acid were prepared. The acid esters were obtained by heating on a water bath a mixture of equimolar amounts of the acid anhydride and an aryloxy ethanol: 2,4-dichlorophenoxyethanol was reacted with 3,6-endoxohexahydrophthalic anhydride; 2,4-dichlorophenoxyethanol and 2,4,5-trichlorophenoxyethanol were reacted with 4,5-dichloro-3,6-endoxohexahydrophthalic anhydride. All the compounds thus synthesized had not been previously reported in the literature. Their formulas, yields, melting points, and molecular weights are tabulated. Orig. art. has: 1 table.

SUB CODE: OC, GC, CB / SUBM DATE: 02Dec63 / ORIG REF: 004

Card 1/1

09011373

L 2158-66 EWT(1)/EWT(m)/EWP(j)/EWA(b)-2 RM/RO/GS

ACC NR: AP5026042 UR/0000/65/000/000/0258/0259

47 44 B

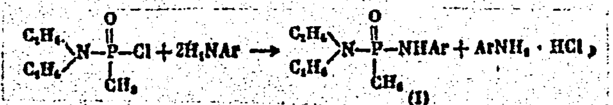
AUTHOR: Mel'nikov, N. N.; Grapov, A. F.; Razvodovskaya, L. V.

TITLE: Herbicides and plant-growth regulators. 41. Synthesis of unsymmetrical diamides of methylphosphonic acid

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Biologicheski aktivnyye soyedineniya (Biologically active compounds). Moscow, Izd-vo Nauka, 1965, 258-259

TOPIC TAGS: pesticide, fungicide, herbicide, growth regulator, phosphonic acid derivative

ABSTRACT: In the course of continuing search for new pesticides, a series of N,N-diethyl-N'-arylmethylphosphonodiamides were prepared from N,N-diethylamidomethylphosphonyl chloride and substituted anilines:



$$(C_2H_5)_2N-P(O)(CH_3)-Cl + 2H_2NAr \rightarrow (C_2H_5)_2N-P(O)(CH_3)-NHAr + ArNH_2 \cdot HCl,$$

(I)

where Ar = C_6H_5, o-ClC_6H_4, m-ClC_6H_4, p-ClC_6H_4, o-$CH_3C_6H_4$, p-$CH_3C_6H_4$, p-$NO_2C_6H_4$, p-$CH_3OC_6H_4$, p-$C_2H_5OC_6H_4$. Most of the compounds obtained inhibit the growth of the fungi Borytis cinerea, Fusarium oxysporum, Rhizoctonia violacca, and Fusicladium dendriticum. Only N-p-nitrophenyl-N',N'-diethylmethylphosphonodiamide approaches the

Card 1/2

L 2158-66

ACC NR: AP5026042

3

standard (1,4-dichloronaphthoquinone) in effectiveness. Orig. art. has: 1 table.

[VS]

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy (All-Union Scientific Research Institute of Chemicals for Plant Protection) 44,55

SUBMITTED: 10Feb64 ENCL: 00 SUB CODE: GC, LS

NO REF SOV: 003 OTHER: 004 ATD PRESS: 4119

Card 2/2 dg

L 35527-65 EWT(m)/EPF(c)/T Pr-4 DJ S/0286/65/000/005/0057/0058

20

ACCESSION NR: AP5008180

AUTHORS: Mandel'baum, Ya. A.; Mel'nikov, N. N.; Petyakina, Ye. I.; Vinogradova, I. E.; Pil'menshteyn, I. A.

8

TITLE: A method for obtaining an antiabrasion additive for lubricating oils. Class 23, No. 168828

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 57-58

TOPIC TAGS: abrasion, wear resistance, dialkyl ester, dithiophosphoric acid, dinonyl ester, hexachlorcyclopentadiene

ABSTRACT: This Author Certificate presents a method for obtaining an antiabrasion additive for lubricating oils. The additive is based on dialkyl esters. To improve the quality of the additive, dialkyl esters of dithiophosphoric acid, such as dinonyl ester of dithiophosphoric acid, are subjected to interaction with hexachlorcyclopentadiene.

ASSOCIATION: none

SUBMITTED: 28Mar62

ENCL: 00

SUB CODE: GC, FP, MT

NO REF SOV: 000

OTHER: 000

Card 1/1

L 52171-65 EWT(1)/EWA(j)/EWA(b)-2 Pa-4 RO

ACCESSION NR: AP5015538 UR/0286/65/000/008/0079/0080

AUTHORS: Mel'nikov, N. N.; Grapov, A. F.; Lebedeva, N. V.; Bakumenko, L. A.; Bukashkina, Z. V.

24
B

TITLE: A method for controlling weeds. Class 45, No. 170245

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 79-80

TOPIC TAGS: agriculture, pesticide, ester, amidoester

ABSTRACT: This Author Certificate presents a method for controlling weeds by herbicides. To broaden the assortment of herbicides, amidoesters of methyl- and chloromethylphosphinic acid, with a general formula shown in Fig. 1 on the Enclosure, are used as a herbicide. Orig. art. has: 1 formula.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy (All-Union Scientific Research Institute of Chemical Means for the Protection of Vegetation)

SUBMITTED: 15Jun64 ENCL: 01 SUB CODE: OC

NO REF SOV: 000 OTHER: 000

Card 1/2

L 52171-65

ACCESSION NR: AP5015533 ENCLOSURE: 01

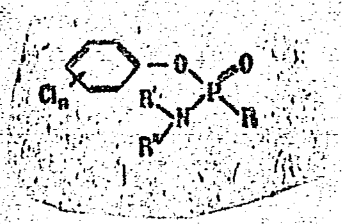


Fig. 1

R- CH_3 or $ClCh_2$; R' = H or alkyl C_1-C_4; R"- alkyl C_1-C_4; n- an integral number from 1 to 5

Card 2/2

L 63869-65 EWT(1)/EWA(j)/EWT(m)/EWA(b)-2 RO/RM

ACCESSION NR: AP5021555 UR/0286/65/000/013/0020/0020

547.419.1.07+632.952

31

B

44,55 44,55 44,55

AUTHOR: Mandel'baum, Ya. A.; Mel'nikov, N. N.; Bakanova, Z. M.

TITLE: A method for producing new organophosphorus insecticide-amides of O-alkyl-S-arylthiophosphoric acid. Class 12, No. 172323

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 20

TOPIC TAGS: insecticide, organic amide, organic phosphorus compound, chlorinated organic compound

44,55

ABSTRACT: This Author's Certificate introduces a method for producing new organophosphorus insecticide-amides of O-alkyl-S-arylthiophosphoric acid by interacting chlorothiophosphates and amines in the presence of a hydrogen chloride acceptor. Insecticidal preparations are produced by using O-alkyl-S-arylchlorothiophosphate.

ASSOCIATION: none

SUBMITTED: 14Jun62 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 000 OTHER: 000

mlb

Card 1/1

L 2940-66 EWT(m)/EPF(c)/T DJ

ACCESSION NR: AP5024388 UR/0286/65/000/015/0068/0068
621.892.8 3 3 B

AUTHOR: Mel'nikov, N. N. 44; Mandel'baum, Ya. A. 44; Petyakina, Ye. I. 44; Vinogradova, I. E. 44

TITLE: Preparative method for an anti-wear additive 11 to lubricating oil 11,44. Class 23, No. 173368

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 68

TOPIC TAGS: lubricating oil, antiwear additive, lubricant additive

ABSTRACT: An Author Certificate has been issued for a preparative method for an anti-wear additive to lubricating oils which is based on salts of dialkyl thiophosphates. To improve the quality of the additive, the salt is treated with hexachlorocyclopentadiene. [SM]

ASSOCIATION: none

SUBMITTED: 28Mar62 ENCL: 00 SUB CODE: FP

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4110

Card 1/1 PC

L 1433-66 EWT(1)/EWA(j)/EWA(b)-2 RO

ACCESSION NR: AP5024420 UR/0286/65/000/015/0121/0121
632.954

AUTHOR: Mel'nikov, N. N.; 44,55 Mandel'baum, Ya. A.; 44,55 Lomakina, V. I.; 44,55 Stonov, L. D.; 44,55
Yakimova, N. F.; 44,55 Sergeyeva, T. A. 44,55 L,44,55

45
B

TITLE: A method of plant-growth regulation. Class 45, No. 173535

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 121

TOPIC TAGS: defoliant, phosphonacetamide

ABSTRACT: Dialkoxyphosphonacetamides can be used as defoliants to control plant growth, in conjunction with herbicides. [VS]

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy (All-Union Scientific Research Institute of Chemicals for Protection of Plants) 44,66

SUBMITTED: 14Mar64 ENCL: 00 SUB CODE: LS OC

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4100

Card 1/1 DP

MEL'NIKOV, N.N.; NURIDZHANYAN, K.A.; [illegible], G.V.; GUSEVA, L.P.

Herbicides and growth promoting substances. Part 43: Synthesis of chloromethylaryloxy-α-propionic and chloromethylaryloxy-γ-butyric acids. Zhur. org. khim. 1 no. 12:2166-2169 D '65 (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy, Moskva. Submitted November 3[illegible], 1964.

MEL'NIKOV, N.N., prof.

Second All-Union Conference on the Chemical Protection of Plants. Zhur. VKHO 10 no.2:223-224 '65. (MIRA 18:6)

MEL'NIKOV, N., prof.

Second All-Union Conference on Chemicals for Plant Protection. Zashch. rast. ot vred. i bol. 10 no.3:4-6 '65.
(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy.

MEL'NIKOV, N.N., prof.

Bibliography. Zhur. VKHO 10 no.3:346 '65. (MIRA 18:8)

MEL'NIKOV, N.N.; GRAPOV, A.F. RAZVODOVSKAYA, L.V.

N-alkylamidomethylthiophosphonyl chlorides. Zhur.VKHO 10
no.4:463-464 '65. (MIRA 18:11)

Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy.

LEBEDEVA, K.V.; MEL'NIKOV, N.N.; PODOL'SKAYA, R.S.

Organic insectofungicides. Part 81: Mechanism of the oxidation of aldrin to dildrin with hydrogen peroxide in acetic acid. Zhur. ob. khim. 35 no.7:1307-1310 Jl '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy.

L 00889-66 EWT(l)/EWA(j)/EWT(m)/EPF(c)/EWP(j)/T/EWA(b)-2 RO/RM

ACCESSION NR: AP5020087 UR/0079/65/035/008/1496/1498
542.955.2 : 547.

44,55 44,55 44,55 35

AUTHOR: Shvetsova-Shilovskaya, K. D.; Matyuk, L. N.; Mel'nikov, N. N.

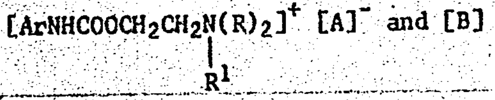
6,44,55 7

TITLE: Organic insectofungicides. LXXXII. Interaction of trialkylthiophosphates with dialkylamminoethylcarbamates

SOURCE: Zhurnal obshchey khimii, v. 35, no. 8, 1965, 1496-1498

TOPIC TAGS: fungicide, alkyl radical, hydrocarbon, carbamic acid, insecticide

ABSTRACT: Several O,O-dialkylthiophosphates of β-arylcarbamidoethyl-N-trialkylammine not previously reported in the literature were synthesized with the objective of examining their fungicidal action. Each compound was synthesized in the following manner: to 0.01 g-mole of carbamic acid ester dissolved in 5 ml of petroleum ether was added 0.01 g-mole of trialkylthiophosphate. The mixture was held for several days at 25°C. Then the solvent was distilled off and the residue was washed with boiling petroleum ether. The oily product was seasoned at 45-90°C at 0.1-0.5 mm Hg. The yields varied from 63 to 99%. The products corresponded to general formula



$$[\mathrm{ArNHCOOCH_2CH_2}\underset{\substack{|\\ \mathrm{R^1}}}{\mathrm{N}}(\mathrm{R})_2]^+ [\mathrm{A}]^- \text{ and } [\mathrm{B}]$$

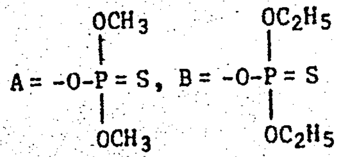
Card 1/2

L 00889-66

ACCESSION NR: AP5020087

0

where A and B are



$$A = -O-\overset{OCH_3}{\underset{OCH_3}{P}} = S, \quad B = -O-\overset{OC_2H_5}{\underset{OC_2H_5}{P}} = S$$

Ar is meta-ClC_6H_4, para-ClC_6H_4, and C_6H_5; R is C_2H_5, C_4H_9, C_5H_{11}, and C_6H_{13}; R' is CH_3 and C_2H_5. For most of the compounds the refractive indices and densities were determined. Very good agreement was found between the experimentally determined chemical formulas (ultimate analysis) of various compounds and the content of the individual elements calculated from the chemical formula. All the synthesized compounds were found to be weak fungicides. Orig. art. has: 1 table and 1 formula.

ASSOCIATION: none

SUBMITTED: 26Mar64 ENCL: 00 SUB CODE: OC

NO REF SOV: 004 OTHER: 000

Card 2/2

BELIKOVA, N.A.; LEBEDEVA, K.V.; MEL'NIKOV, N.N.; PLATE, A.F.

Organic insectofungicides. Part 83.: Oxidation of some cyclic compounds by hydrogen peroxide. Zhur. ob. khim. 35 no.10: 1746-1752 O '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy.

LOMAKINA, V.I.; VORONKOVA, V.V.; MANDEL'BAUM, Ya.A.; MEL'NIKOV, N.N.

Organic insectofungicides. Part 84: Interaction of trialkyl phosphites with thiol monochloroacetates. Zhur. ob. khim. 35 no.10:1752-1759 O '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy.

MEL'NIKOV, N.N.; GRAPOV, A.F.; RAZVODOVSKAYA, L.V.; PORTNOVA, S.L.

Herbicides and plant regulators. Part 43: Reaction of N,N-dimethylamidomethylphosphonyl chloride with anilines. Zhur. ob. khim. 35 no.10:1771-1774 O '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rasteniy.

VORONKOVA, V.V.; LOMAKINA, V.I.; MANDEL'BAUM, Ya.A.; MEL'NIKOV, N.N.

Organic insectofungicides. Part 88: Reaction of trialkyl phosphites with thiol monochloroacetates. Zhur.ob.khim. 35 no.12:2209-2216 D '65. (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy. Submitted October 2, 1964.

[illegible]-67 EWT(m)/EWP(j) [illegible]

ACC NR: AP7003104 SOURCE CODE: UR/0409/66/000/003/0465/0466

AUTHOR: [illegible], [illegible], N. D. and [illegible], L. V.

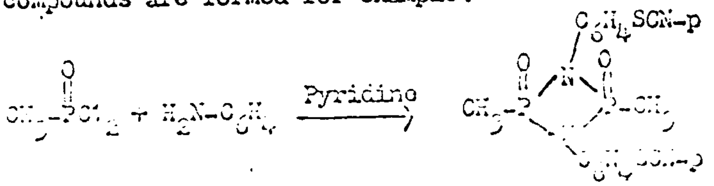
ORG: All-Union Scientific Research Institute of Chemical Means of Plant Protection, Moscow (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

TITLE: "Synthesis of p-Thiocyanoaryldioxophosphazanes"

SOURCE: Moscow, Khimiya Geterotsiklicheskikh Soyedineniy, No. 3, 1966, pp 465-466

TOPIC TAGS: organic synthetic process, phosphorylation, IR spectrum, phosphonic acid

ABSTRACT: During the investigation of phosphorylation of the substituted p-thiocyanoanilines, the interactions of 4-thiocyanoaniline, 3-chloro-4-thiocyanoaniline and 3-methyl-4-thiocyanoaniline with methyl- and phenylphosphonic acid dichlorides were studied; it was shown that the reaction proceeds uniquely; even at room temperature the corresponding heterocyclic compounds are formed for example:



Card 1/2 UDC: 546.18 + 547 + 711 + 543.422

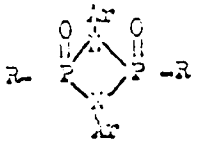
0785 2251

L 10303-67

ACC NR: AP7003104

The structure of the compounds obtained emanates from the data of the experimental analysis, molecular weight and infrared spectra. The absence of bands in the infrared spectra, which characterize the NH-fragments, indicates the formation of the cyclic phosphorus-containing substances and not the dianilines of phosphonic acids. It should be noted that in the process of the reaction the thiocyano group is not lost since there is a 2160 cm^{-1} band in the infrared spectrum.

Six p-thiocyanoaryldioxophosphozanes with the molecular structure that follows were characterized:



where R = CH_3 and Ar = C_6H_4SCN-p, $C_6H_3(Cl)SCN$-3,4 or $C_6H_3(CH_3)SCN$-3,4.

Orig. art. has: 1 table. [JPRS: 38,967]

TOPIC TAGS: organic synthetic process, phosphorylation, IR spectrum, phosphoric acid

SUB CODE: 07 / SUBM DATE: 28Jun65 / ORIG REF: 002 / OTH REF: 002

Card 2/2

L 47178-66 EWT(m)/EWP(v)/T/EWP(j) IJP(c) WW/RM

ACC NR: AP6032609 (N) SOURCE CODE: UR/0191/66/000/010/0012/0013

AUTHOR: Tsubina, Kh. V.; Al'shits, I. M.; Vladimirova, I. L.; Grad, N. M.; Mel'nikov, N. N. 19 B

ORG: none

TITLE: Self-extinguishing unsaturated polyester resin based on dichloromaleic anhydride

SOURCE: Plasticheskiye massy, no. 10, 1966, 12-13

TOPIC TAGS: polyester ~~resin, self-extinguishing~~ plastic resin, unsaturated resin, dichloromaleic anhydride based resin

ABSTRACT: A new self-extinguishing unsaturated polyester resin has been prepared by polycondensation of ethylene glycol, maleic- and dichloromaleic anhydrides, followed by addition of 30% styrene and 5% antimony trioxide to the polycondensation product. The resin is curable with 3% cumene hydroperoxide and 8% cobalt naphthenate (in the form of a 10% styrene solution), and can be used as a binder in glass-reinforced plastics. Contact-molded specimens of such plastics were self-extinguishing and exhibited good mechanical properties (tensile strength, 3050—3950 kg/cm^2; compressive strength, 2090—2650 kg/cm^2). [BO]

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 002/ ATD PRESS: 5091

Card 1/1 blg UDC: 678.642'.522'.448'.420.01:536.468

L 05185-67 EWT(m)/EWP(j) RM

ACC NR: AP7000739 SOURCE CODE: UR/0079/66/036/005/0857/0860

30

3

ZAKS, P. G., MANDEL'BAUM, Ya. A., MEL'NIKOV, N. N., IVANOV, V. V.,

All-Union Scientific Research Institute of Chemical Means of Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)

"Interaction of Trialkylthiolphosphates with Salts of O,O-Dialkylthiophosphoric Acid"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 5, 1966, pp 857-860

Abstract: Trialkylthiolphosphates were found to alkylate ammonium salts of O,O-dialkylthiophosphoric acids, forming the corresponding trialkylthiolphosphates and salts of O,S-dialkylthiophosphoric acids. The alkylation can be carried out with catalytic amounts of the trialkylthiolphosphates. In the alkylation of salts of dimethylthiophosphoric acid by various alkylating agents, such as esters, amides, and sulfamides of chloroacetic acid, the yield of alkylation products was very low in comparison with derivatives of other dialkylthiophosphoric acids. The cause of the low yield was found to be the high methylating ability of the products of this reaction, O,O-dimethyl-S-alkyl esters of thiophosphoric acid. The salts obtained are compared with the corresponding thione salts. Orig. art. has: 1 figure. [JPRS: 37,023]

TOPIC TAGS: alkylation, phosphate, organic phosphorus compound

SUB CODE: 07 / SUBM DATE: 07Apr65 / ORIG REF: 005 / OTH REF: 004

Card 1/1 vmb

0923 1907

ACC NR: AP6025588 SOURCE CODE: UR/0413/66/000/013/0020/0020

INVENTOR: Mandel'baum, Ya. A.; Belova, L. A.; Soyfer, R. S.; Mel'nikov, N. N.

ORG: none

TITLE: Preparation of alkylamino-O-alkyl-S-(N-alkylcarbamylmethyl)dithiophosphates. Class 12, No. 183205. [announced by the All-Union Scientific Research Institute of Chemical~~s~~ Means for Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 20

TOPIC TAGS: pesticide, alkylaminodithiophosphate ester, mercaptoacetamide, phosphate

ABSTRACT:

In the proposed method for preparing alkylamino-O-alkyl-S-(N-alkylcarbamylmethyl)dithiophosphates with pesticidal properties, an alkylaminodithiophosphate is treated with alcoholic mercaptoacetamide or with sodium methoxide or sodium ethoxide, in alcohol, with subsequent removal of NaCl by evaporation, washing, and rectification. [W.A. 50; CBE No. 10]

SUB CODE: 07,06/ SUBM DATE: 08Jul65/

Card 1/1 UDC: 547.419.1.07

ACC NR: AP6029025 SOURCE CODE: UR/0413/66/000/014/0025/0025

INVENTOR: Mandel'baum, Ya. A.; Abramova, G. L.; Golovleva, L. M.; Mel'nikov, N. N.

ORG: none

TITLE: Preparation of alkylamides of O-alkylchlorothiophosphoric acid. Class 12, No. 183753 [announced by All-Union Scientific Research Institute of Chemicals for Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 25

TOPIC TAGS: insecticide, ~~alkylchlorothiophosphoric acid amide~~ phosphoric acid, organic amide

ABSTRACT: To simplify the process of the preparation of alkylamides of O-alkylchlorothiophosphoric acid by the treatment of alkyl dichlorophosphates with alkylamines at temperatures ranging from -5 to -10°C, with subsequent distillation, the process is carried out in the presence of an aqueous alkali. [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 08Jul65/

Card 1/1 UDC: 547.419.1.07

ACC NR: AP6030564 SOURCE CODE: UR/0413/66/000/016/0034/0034

INVENTOR: Mandel'baum, Ya. A.; Abramova, G. L.; Golovleva, L. M.; Mel'nikov, N. N.

ORG: none

TITLE: Preparation of O-ethyl S-phenyl dithiophosphoric acid n-butylamide. Class 12, No. 184861 [announced by All-Union Scientific Research Institute of Chemicals for Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 34

TOPIC TAGS: ~~ethyl phenyl dithiophosphoric acid n butylamide~~, triethylamine, alkyl chlorothiophosphoric acid, phosphoric acid, phenyl compound, chemical reaction

ABSTRACT: To increase the yield of O-ethyl S-phenyl dithiophosphoric acid n-butylamide in its preparation from thiophenol, O-alkyl chlorothiophosphoric acid amide, and triethylamine, the reaction is conducted with an eight-fold excess of triethylamine. [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 08Jul65/

Card 1/1 UDC: 547.419.1.07

ACC NR: AP6035676 (A,N) SOURCE CODE: UR/0413/66/000/019/0025/0025

INVENTOR: Baskakov, Yu. A.; Mel'nikov, N. N.; Kozyukov, V. P.; Stonov, L. D.; Sergeyeva, T. A.

ORG: none

TITLE: Preparation of orthochlorophenyl esters of N-isopropyl- and N-sec.-butylcarbamic acids. Class 12, No. 186434 [announced by All-Union Scientific Research Institute of Chemicals for Plant Protection (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 25

TOPIC TAGS: orthochlorophenyl isopropylcarbomate, orthochlorophenyl butylcarbamate, isopropyl formate, herbicide, ester, carbamic acid, wheat

ABSTRACT: In the proposed method, o-chlorophenyl N-isopropylcarbamate and o-chlorophenyl N-sec.-butylcarbamate are obtained by the reaction of o-chlorophenyl formate with isopropyl- and sec.-butylamine in water with an excess of the amine or in the presence of an equimolar amount

Card 1/2 UDC: 547.562.07